

Please type a plus sign (+) inside this box → ☐

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 112518.00003

First Inventor Mysore P. Divakar

Title Area Array Packages with Overmolded ...

Express Mail Label No. EL988554545US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 17]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 7]
5. Oath or Declaration [Total Pages 2]
- a. ☒ Newly executed (original or copy)  
Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
- b. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
  - ii. ☐ paper
- c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other: \_\_\_\_\_

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**☒ Customer Number

26707

or ☐ Correspondence address below

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Robert D. Atkins

Registration No. (Attorney/Agent)

34,288

Signature

Date

January 22, 2004

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Express Mail No. EL988554545US

PTO/SB/17 (10-03)  
Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 1,148.00

## Complete if Known

Application Number  
Filing Date January 21, 2004  
First Named Inventor Mysore P. Divakar  
Examiner Name  
Art Unit  
Attorney Docket No. 112518.00003

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

17-0055

Quarles &amp; Brady LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	770
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$ ) 770.00

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
34	-20 = 14	18	252.00
Independent Claims	4	-3** = 1	86.00
Multiple Dependent			

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	1052 50	2052 25	Surcharge - late filing fee or oath	
1053 130	1053 130	1812 2,520	1812 2,520	Surcharge - late provisional filing fee or cover sheet	
1804 920*	1804 920*	1805 1,840*	1805 1,840*	Non-English specification	
1805 1,840*	1805 1,840*	1251 110	2251 55	For filing a request for ex parte reexamination	
1251 110	2251 55	1252 420	2252 210	Requesting publication of SIR prior to Examiner action	
1252 420	2252 210	1253 950	2253 475	Requesting publication of SIR after Examiner action	
1253 950	2253 475	1254 1,480	2254 740	Extension for reply within first month	
1254 1,480	2254 740	1255 2,010	2255 1,005	Extension for reply within second month	
1255 2,010	2255 1,005	1401 330	2401 165	Extension for reply within third month	
1401 330	2401 165	1402 330	2402 165	Extension for reply within fourth month	
1402 330	2402 165	1403 290	2403 145	Extension for reply within fifth month	
1403 290	2403 145	1451 1,510	1451 1,510	Notice of Appeal	
1451 1,510	1451 1,510	1452 110	2452 55	Filing a brief in support of an appeal	
1452 110	2452 55	1453 1,330	2453 665	Request for oral hearing	
1453 1,330	2453 665	1501 1,330	2501 665	Petition to institute a public use proceeding	
1501 1,330	2501 665	1502 480	2502 240	Petition to revive - unavoidable	
1502 480	2502 240	1503 640	2503 320	Petition to revive - unintentional	
1503 640	2503 320	1460 130	1460 130	Utility issue fee (or reissue)	
1460 130	1460 130	1807 50	1807 50	Design issue fee	
1807 50	1807 50	1806 180	1806 180	Plant issue fee	
1806 180	1806 180	8021 40	8021 40	Petitions to the Commissioner	
8021 40	8021 40	1809 770	2809 385	Processing fee under 37 CFR 1.17(q)	
1809 770	2809 385	1810 770	2810 385	Submission of Information Disclosure Stmt	
1810 770	2810 385	1801 770	2801 385	Recording each patent assignment per property (times number of properties)	
1801 770	2801 385	1802 900	1802 900	Filing a submission after final rejection (37 CFR 1.129(a))	
1802 900	1802 900	Other fee (specify)			
*Reduced by Basic Filing Fee Paid			SUBTOTAL (3)		
			(\$ ) 40.00		

## SUBMITTED BY

Name (Print/Type)

Robert D. Atkins

Registration No.  
(Attorney/Agent)

34,288

(Complete if applicable)

Telephone 602-229-5311

Signature

Date

January 22, 2004

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

1810009

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**EXPRESS MAIL CERTIFICATE: EL988554545US**

I hereby certify that this correspondence listed below is being deposited with the United States Postal Service on the date set forth below as Express Mail in an envelope addressed to: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Signature  
and Deposit: January 22, 2004

By: 

(Signature of person depositing mail)

MARITZA O'NEILL

**CERTIFICATE OF MAILING PURSUANT TO 37 C.F.R. 1.10**

In re Application of: Divakar *et al.*

Serial No.: To be assigned

Filed: January 22, 2004

For: *AREA ARRAY PACKAGES WITH  
OVERMOLDED PIN-FIN HEAT  
SINKS*

Attorney Docket No.: 112518.00003

Group Art Unit: Unassigned

Examiner: Unassigned

**Mail Stop: Patent Application**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**Type of Filing:**

- 1) Utility Patent Application Transmittal
- 2) Fee Transmittal
- 3) Patent Application (17 pages plus cover sheet)
- 4) Formal Drawings (7 sheets, Figs. 1-11)
- 5) Executed Declaration (2 pages)
- 6) Power of Attorney (2)
- 7) Assignment (2), plus Recordation Form Cover Sheet
- 8) Application Data Sheet (4 pages)
- 9) Return postcard